# Marine Life Protection Act Initiative Public Comments Submitted through March 31, 2010

DEAR HILPA STUDY GROUP, OR, TO WHOM IT

I'M A RESIDENT OF SHELTER CONE IN
HUMBOUDT CO. CALIFORNIA. I'M A NATIVE
BOOK CALIFORNIAN. I'M A NARD WORKING
FAMILY MAN. I'M ALSO A SPORTSMAN,
(FREEDIVER, SPEARFISHERMAN), SURFER
AND ROD + REEL FISHERMAN).

I'VE BEEN FISHING AND DIVING THE CALIFORNIA COAST SINCE THE MID 70° AS A TEENAGER. IN ALL THESE YEARS
I'VE ONLY HARVESTED FOOD FROM THE OCEAN TO FEED MYSELF AND MY
IMMEDIATE FAMILY.

DIVING FOR FISH IN SHELTER CONDITIONS,

DIFFICULT DUE TO OCEANIC CONDITIONS,

MUDDY WATER, CURRENTS ETC., WE

ONLY HAVE ABOUT TO DAYS PER YEAR

THAT WE CAN DIVE FOR FISH. OUT OF

THOSE TO DAYS I'M LUCKY TO SET

IO DAYS THAT I'M ABUE TO SET AWAY

FROM WORK, THEN IN THE COLD WATER

I ONLY LAST I HOUR PER DIVEDAY.

THE ABOVE TRANSLATES TO 10 HOURS

PER YEAR OF SPEARFIEHING IF

THE REGULATIONS ALLOW ME TO

SPEARIFISH ALL YEAR. I HOPE THIS

MISHT GIVE YOU AN IDEA OF THE

MINISCULE AMOUNT OF IMPACT A FREEDIVING SPEARFISHERMAN MIGHT HAVE ON OUR NORTHCOAST OCEAN RESOURCES. I'LL ASK YOU TO PLEASE CONSIDER WHAT F'VE TOLD YOU HERE BEFORE YOU THINK ABOUT DENYING ACCESS TO SPEARFISHERMEN.

ANOTHER POINT I'O LIKE TO MAKE YOU
AWARE OF IS THE FACT THAT PEOPLE LIKE
MYSELF HAVE SETTLED IN THIS AREA SO
THAT WE MAY ENJOY OUR PROLIFIC OCEAN
RESOURCES FOR RECREATION AND SUSTEMANCE

I'VE WORKED AND SAVED MY MONEY
MY WHOLE ADULT LIFE TO BE ABLE TO
BUY MY PROPERTY AND BUILD MY HOME
HERE, I'M HERE BECAUSE I LIKE THE
PLACE AND I LIKE THE OCEAN, IT'S
A PART OF ME, I CAN'T DO WITHOUT.
MY LIFES WORK, MY DREAMS, EVERYTHING I NAVE IS HERE.

T'M NOT THE ONLY PERSON THAT
HAS PUT SO HUCH INTO BEING HERE.
THERE ARE MANY OF US WHO HAVE
WORKED OUR WHOLE CIVES TO BE ABOUT
TO LIVE HERE AND FISH HERE. IF
YOU WERE TO DENY US ACCESS
TO OUR OCEAN AND THE RESOURCES
THAT WE ENJOY YOU WOULD KILL

US. YOU'D KILL OUR DREAMS. YOU'D

DESTROY OUR LIFES WORK. YOU'D WASTE

OUR LIFE SAVINGS, YOU'D ROB US AND

OUR CHILDREN AND THEIR CHILDREN

OF THIS BEAUTIFULL GIFT FROM ABOVE.

I'M ASKING YOU TO PLEASE CONSIDER

THE EFFECTS THAT YOU'D HAVE ON REAL

PEOPLE AND THEIR FAMILYS IF YOU WERE

TO DENY US ALLESS.

HERE ON THE NORTH COAST MOTHER NATURE HERSELF LIMITS OUR ALLESS MOST OF THE YEAR. HIGH SURF, HIGH WINDS, CURRENTS, COLD WEATHER, ETC.
THE STATE FISH & SAME REGULATIONS
COMBINIED WITH FEDERAL GROUND FISH

MANAGEMENT REGULATIONS ARE ALREADY CHOKING US. THESE ARE SOME OF THE MOST REGULATED WATERS ON EARTH ADDING TO MOTHER NATURES OWN WAY OF REGULATING US THERES SO LITTLE OF PROPERTURITY FOR A PERSON TO GET ON THE WATER THAT FURTHER REGULATION IN THE WATER (IN MY HUMBUS OPINION).

THANKYON FOR YOUR CONSIDERATION.

RESPECTFULLY,

MARC T. SULLIVAU

### Redwood Valley Little River Band of Pomo Indians

3250 ROAD I / REDWOOD VALLEY, CALIFORNIA 95470 (707) 485-0361

FAX (707) 485-5726

March 10, 2010

Ken Wiseman MLPA Initiative California Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, California 95814

Dear Mr. Wiseman,

We appreciate your willingness to hear our concerns and respect our efforts to ensure the MLPA Initiative protects the sovereign rights of Native people to continue to use marine resources for tribal subsistence and cultural purposes. Enclosed you will find the Redwood Valley Little River Band of Pomo Indians Resolution # 10-02-01 "To Protect and Preserve Aboriginal Gathering Rights on the California Coast and Exclusion for California Tribes under the MLPA Initiative". The tribe has and will continue to gather traditional foods within our aboriginal territories, most of which encompasses Mendocino County.

If you have any questions or comments regarding our resolution and our position please feel free to contact our Redwood Valley Tribal Environmental Program Office at 707-485-0361.

Respectfully Submitted,

Elizabeth Hansen Tribal Chairperson

cc: United States President Barack Obama

Governor Arnold Schwarzenegger

Senator Barbara Boxer

Senator Dianne Feinstein

Congressman Mike Thompson

Assemblyman Wes Chesbro

Senator Pat Wiggins

Mendocino County Supervisors

Redwood Valley Tribal Environmental Program



## Redwood Valley Little River Band of Pomo Indians

3250 ROAD I / REDWOOD VALLEY, CALIFORNIA 95470 (707) 485-0361

FAX (707) 485-5726

REDWOOD VALLEY LITTLE RIVER BAND OF POMO INDIANS
RESOLUTION TO PROTECT AND PRESERVE ORIGINAL GATHERING RIGHTS
ON THE CALIFORNIA COAST AND EXCLUSION FOR CALIFORNIA TRIBES
UNDER THE MLPA INITIATIVE.

### **RESOLUTION #10-02-01**

WHEREAS:

the Redwood Valley Little River Band of Pomo Indians is a federally recognized Indian Tribe, recognized by the Secretary of the Interior as a sovereign Indian Tribe with inherent powers of self-government; and

**WHEREAS:** 

the Tribe is governed by a Tribal Council, which is empowered by the Tribal Constitution to negotiate and conduct agreements with Federal, State and Local government, which may effect the Tribe or the Reservation; and,

WHEREAS:

The state is in the process of designating areas for restricted use to promote the conservation and recovery of marine plant and animal communities, but to date has not conducted government-to-government consultation with Redwood Valley Little River Band of Pomo Indians to discuss and assess the potential negative impacts of such restricted uses on our tribes' traditional subsistence fishing, gathering/harvesting, and religious rights; and

WHEREAS:

the focus of the Task Forces is to address the recreational, educational and commercial opportunities of these coastal waters, however, such uses are typically the antithesis of Tribal uses, and therefore Tribal rights and interests have not been considered in the process; and

**WHEREAS:** 

California tribes, as the original stewards of this land, retain original usufructary rights to protect the land, air, water, and food sources upon their homeland; and

WHEREAS:

The failure of the State to conduct government-to-government consultations with tribes violates the spirit and intent of the Federal and State consultation policies (See Executive Memorandum of April 29, 1994 on Government-to-Government Relations with Native American Tribal Governments, Executive Order of November 6, 2000 on Consultation and Coordination with Indian Tribal Governments, Presidential Memorandum of November 5, 2009 on Tribal Consultation; California Government Code sections 11019.8 and 65040.12(e); California Public Resources Code section 5097.9) which are designed to assure adequate input from affected tribes; and

**WHEREAS:** 

The failure of the State to consider Tribal rights and religious practices when designating restricted areas violates the Religious Freedom Restoration Act and the American Indian Religious Freedom Act because such designations impede the ability of tribes to practice their traditional religions through use of the coastal areas for ceremonies and harvesting and gathering of ceremonial sustenance and objects.

NOW THEREFORE BE IT RESOLVED THAT Redwood Valley Little River Band of Pomo Indians hereby demands that the State immediately engage in government-to-government consultation with all California tribes concerning the negative impacts to Tribal rights and interests by the MLPA and the designation of MPAs; and

NOW THEREFORE BE IT FURTHER RESOLVED THAT Redwood Valley Little River Band of Pomo Indians demands that the State assure the protection and continued practices of California tribes in the use of the coastal resources for sustenance, ceremonial and cultural uses when implementing the MLPA through the designation of MPAs; and

NOW THEREFORE BE IT FINALLY RESOLVED THAT Redwood Valley Little River Band of Pomo Indians hereby demands an immediate exclusion for California Tribes under the California Marine Life Protection Initiative which will allow unobstructed access to fish and gather traditional foods along the California coast.

### C-E-R-T-I-F-I-C-A-T-I-O-N

The Tribal Council of the Redwood Valley Little River Band of Pomo Indians certifies at a duly called meeting on the 8<sup>th</sup> day of February 2010, with a quorum present, the above Resolution was passed and adopted by a vote of 6 ayes, 0 nays, 0 abstentions.

Elizabeth Hansen, Chairperson

February 8, 2010

ATTEST:

Corine Pearce, Secretary

**February 8, 2010** 

Subject: Sea Urchins and MPAs Date: Sun, 14 Mar 2010 16:00:32 -0700

From: Dave Rudie
To: Emily Sarmin
CC: Bob Bertelli

Emily,

Thank you for helping us with our Sea Urchin science paper. I have made changes reflecting your comments that Bob shared with me.

Bob and I both understand this is a very busy time for you and we appreciate your efforts I spoke with Dr Carr and he says you can help us share this document with the full SAT and in particular the SAT sub committee on LOP.

Please share the Sea Urchins and MPAs document as soon as possible with the SAT.

I have also attached a letter from the California Sea Urchin Commission asking for a review of the LOP status of an Adaptive management MPA allowing a controlled scientific harvest of Sea Urchins.

This letter will be submitted in Public comment on Wednesday at the SAT meeting (it will be presented from the remote Ft Bragg location).

Bob is out fishing and asked me to send out this updated version so we can get some feedback from the SAT on our proposal.

If you have comments on the letter from the Sea Urchin Commission please send them to me

Dave

Members of the MLPAI Science Advisory Team,

The California Sea Urchin Commission (CSUC), requests that the SAT consider and approve a High Level of Protection (LOP) for sea urchin harvest in selected Marine Protected Areas (MPAs), when conducted under a permit granted by the Department of Fish and Game, for the purpose of developing our knowledge and understanding of the relationships between sea urchins, abalones, their predators and kelp. We make this request based on published peer reviewed science on sea urchins and marine protected areas that we are presenting to you (Sea Urchins and MPAs). While we acknowledge that the data is not conclusive in California, we believe it strongly suggests that there is a positive change in biodiversity and biomass to the ecosystem, when commercial harvesting of sea urchins keeps urchin density below the level at which barrens form. In particular, the data indicates that algal and abalone densities are depressed in areas of very high sea urchin densities.

The limited and science based harvest which we will propose in some MPAs, would be co-managed by the Department of Fish and Game, and those sea urchin divers, willing to collect the prescribed data, in cooperation with the Monitoring Enterprise and the California Sea Urchin Commission. The Sea Urchin Commission believes that this type of adaptive management is very cost effective and will help answer many of the unanswered science and management questions, thus helping to improve the design and function of our system of MPAs.

The document we have presented to you demonstrates the benefits of what we propose. In many countries around the world where fishermen are playing an important role in the monitoring of marine protected areas, we see the important "buy in", from those fishing communities, essential for the long term monitoring and potential adaptive management, so important to the success of a given MPA. The Marine Life Management Act and the master plan clearly state, "The MLPA identifies a set of goals for the Marine Life Protection Program including: conservation of diversity and the health of marine ecosystems; recovery of wildlife populations; improvements to recreational and educational opportunities consistent with biodiversity conservation....."By integrating our management proposal, true cross interest support can be built between scientists, managers, community stakeholders, and fishermen. This could be a win-win, and supports the goals of the Marine Life Protection Act.

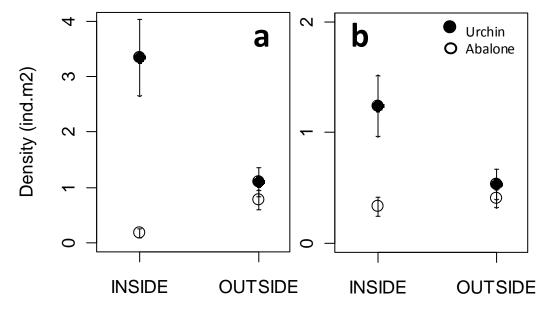
Respectively, Bob Bertelli. Chair, CSUC Tom Trumper, Vice Chair, CSUC

### Sea urchin dynamics and community-based marine protected areas

The role of herbivores, and sea urchins in particular, in structuring shallow temperate subtidal reef systems has been documented in different systems and regions around the world (Shepherd, 1973; Lawrence, 1975; Breen and Mann, 1976; Chapman, 1981; Andrew and Choat, 1982; Choat and Schiel, 1982; Duggins, 1983; Dean et al., 1984; Harrold and Reed, 1985; Fletcher, 1987; Vadas et al., 1986; Chapman and Johnson, 1990; Andrew, 1991, 1994). Sea urchins are important members of subtidal reef communities because some species can overgraze fleshy macroalgae to create barrens habitat and still persist in high population densities (Johnson and Mann 1982). As a result, a sharp decrease in primary production is generally associated with this transition of rocky reef habitats dominated by macroalgal beds to barrens habitat dominated by crustose coralline algae. Further, such deforestation events can wipe out entire algae (e.g. Macrocystis pyrifera) populations with concomitant decreases in the abundance of various associated algae. This generates well documented changes in community composition and repercussions for rocky-reef ecosystem structure and functioning (Dayton 1975a,b; Dayton et al 1984; Schmitt and Holbrook 1990; Sala et al., 1998; Gagnon et al 2004). In California, population explosions of kelp grazers, and sea urchins in particular, resulted in kelp deforestation and transition to barrens at a variety of scales (Leighton 1971, Lawrence 1975, Foster and Schiel 1988, Steneck et al 2002 and references therein).

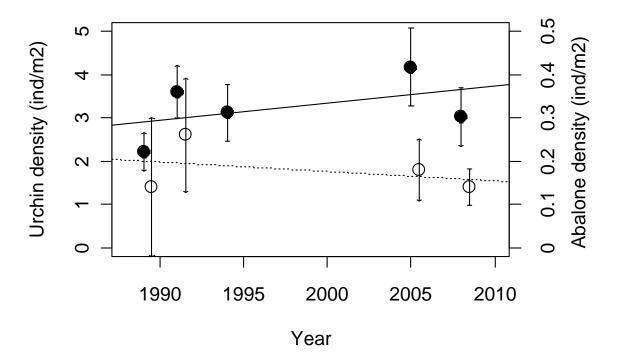
Possible mechanisms underpinning the creation of barrens relate with either a change in sea urchin grazing behavior or an increase in their density. A behavioral shift where cryptic individuals emerge to overgraze attached algae may result from either decreased predator abundance (Bernstein et al., 1981; but see Vadas et al., 1986; Elner and Vadas, 1990) or decreased availability of drift algae (Harrold and Reed, 1985). Alternatively, increases in sea urchin population density and subsequent barrens formation can potentially arise from decreases in predator abundance (Estes and Palmisano, 1974; Duggins, 1980; Wharton and Mann, 1981; Vadas and Steneck, 1995; Steneck, 1997) or unusual massive recruitment events (Hart and Scheibling, 1988). The importance of predators structuring sea urchin populations has been long discussed, with relatively little obvious evidence except in the case of the sea otter (*Enhydra lutris*) as a key predator of sea urchins at some sites in the northeastern Pacific (Estes and Duggins, 1995; Estes et al., 1998). In addition, abundant evidence support the importance of teleost fish in the northwestern Atlantic (Vadas and Steneck, 1995; Shears and Babcock, 2002) and rock lobsters in South Africa (Jasus spp: Mayfield and Branch, 2000; Mayfield et al., 2001) in regulating sea urchin populations, and that the regulatory effect is influenced by fishing of these predators. In California, lobsters and sheepheads are the main predators of sea urchins and potentially regulate its populations (Tegner and Levin 1983; Cowen 1983). Pycnopodia have also been shown to be predators of Sea Urchins in California (Duggins 1983). However, whether predators can be capable of naturally control sea urchins populations and hence maintain healthy kelp ecosystems depends on the system and species. Predation upon sea urchins is generally higher where predatory fish are abundant and large (e.g., within MPAs; Sala and Zabala, 1996; Guidetti, 2006). However, the patterns observed are not consistent in time, at large spatial scales, or in different systems around the world (Sala et al. 1998; Guidetti 2006; Guidetti et al. 2005; Micheli et al. 2005). For example, Andrew and Choat (1982) found no evidence of an effect of fish predation on densities of sea urchins within a marine reserve in New Zealand. Further, Shears and Babcock (2004) stated that, while increased predation may affect sea urchin population structure and density, only under certain environmental conditions are these changes likely to result in cascading effects on algal communities. Further, as stated by Sala et al. (1998), other processes (i.e. recruitment, pollution, disease, large-scale oceanographic events, sea urchin harvesting, food subsidies, and availability of shelters) may also be important in regulating the structure of algae assemblages. In summary, natural control of sea urchin population by predators may or may not occur, depending on the biological, ecological and environmental conditions of a particular system.

Sea urchins and abalones generally share similar food and habitat preferences in kelp forest communities around the world (Tegner and Levin 1982; Davis et al. 1992; Guzman del Proo, 1992) and competition between these two taxa for space and/or food has been documented worldwide (Shepherd 1973; Tegner and Levin 1982; Andrew and Underwood 1992 and references therein). Along the California coast, abalone (Haliotis spp.), red sea urchins (Strongylocentrotus franciscanus) and purple sea urchins (S. purpuratus) feed primarily on the same species of macroalgae and have been described as potential competitors for food and space (Tegner and Levin 1982). In addition, sea urchins capability of overgraze kelp beds with consequent formation of barrens can deprive other herbivores, such as abalone, from food sources. In this respect, and motivated by fishermen's concern that urchin-dominated barren areas were increasing in New South Wales, Australia, Andrew et al. (1998) carried out a sea urchin (Centrostephanus sp.) removal experiment to assess potential benefits in abalone populations. Thirty replicates of at least 1000 m<sup>2</sup> were used to compare different patterns of sea urchin removals. Clearing the echinoids led to a habitat shift from coralline crusts to a range of foliose algae, accompanied by an order-of magnitude increase in abalones. They suggest the potential benefits of an incipient sea-urchin fishery in enhancing abalone populations and they advocate the development of an experimental approach to co-management of the two species. Moreover, Tomascik and Holmes (2003) assessed the distribution and abundance of pinto abalones (Haliotis kamtschatkana) in relation to habitat, competitors and predators in the Broken Group Islands, BC, Canada. They found a positive correlation between abalone size and the abundance of benthic macroalgae and an inverse relationship between abalone size and the abundance of red sea urchins (S. franciscanus). Further, in northern California, Karpov et al. (2001) explored spatial interactions and apparent competitive effects among red abalones (H. rufescens), red sea urchins (S. franciscanus), and purple sea urchins (S. purpuratus) in an area where fishing has large impacts on both taxa, and at unfished reserve sites in which invertebrate density and food availability differ. They found an inverse correlation between adult red abalone and red sea urchin abundance when density of either or both species was high. Their results suggest that differences in density, depth, and food availability play an important role in the observed spatial patterns of red abalones and red sea urchins. They suggest that an intense fishery for red sea urchins appear to have had a positive effect on kelp availability, and abalone growth and abundance. Ultimately, red sea urchin removal led to an increase in red abalone abundance even at a site that was heavily fished by recreational abalone fishers, while at a nearby reserve site where kelp populations are lower, red abalones have declined in abundance as red sea urchins increased. Finally, preliminary analyses of sea urchin and abalone data collected by the California Department of Fish and Game (CDFG 2010) in two different sea urchin closures areas, Caspar and Salt Point, show a similar inverse relationship between densities of both taxa (Fig. 1a and b).



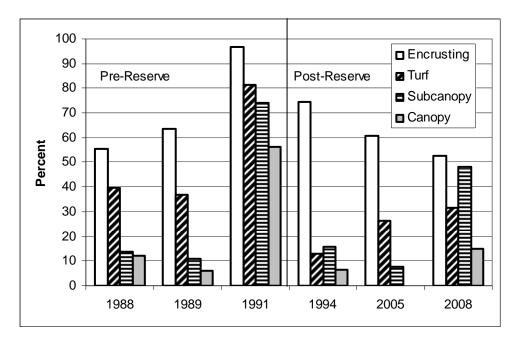
**Figure 1**. Mean densities for sea urchin and abalone inside and outside (a) Caspar closure for the period 1989-2008; and (b) Salt Point closure for 2008.

This analysis should be considered preliminary and exploratory, since the availability and the temporal coverage and replication of data available so far doesn't allow the use of robust statistical methods. However, difference in sea urchins densities inside and outside the reserve were significant in both cases (p<0.005 and p<0.010 for Caspar and Salt Point respectively). Abalone densities inside and outside Caspar were significant (p<0.05) yet not significant in Salt Point (p>0.05). An incomplete time series of sea urchins and abalone densities inside the Caspar reserve show, although not significant (p>0.05), some visual trends of increase in sea urchins and decrease in abalones. Additional data, especially missing years, should be included in order to confirm or reject such trends (Fig. 2).



**Figure 2.** Time series of sea urchin and abalone densities inside the Caspar marine reserve (mean  $\pm$  SE; Coefficients were positive and negative for sea urchin and abalones respectively, although linear model fits were not significant in both cases; p>0.05)

In addition, percentage of algae coverage available for sea urchins (i.e. sub-canopy and canopy) showed a drastic decline after the Caspar/Salt Point reserve was established (Fig. 3), possible supporting the concept of overgrazing by an increased sea urchin population



**Figure 3**. Percentage of algae coverage by type measured along bottom inside the Caspar closure area, period 1988 – 2008. After CDFG (2010).

In contrast with the competitive relationship observed between adult urchins and adult abalone, adult sea urchins may act as facilitators of juvenile recruitment, either providing physical protection for juvenile abalone under their large spine canopy (Tegner and Dayton, 1977; Tegner and Butler, 1989), and/or maintaining coralline algal patches by intense grazing, which have been shown to result in increased abalone settlement (McShane, 1992). Day and Branch (2000) showed a strong, positive relationship between urchins (Parechinus anguwsus) and abalone (Haliotis midae) in the southwestern Cape, South Africa. Of the juvenile abalone sampled, more than 90% were found beneath sea urchins. In addition, Rogers-Bennet and Pearse (2000) stated that red sea urchin may provide an important cryptic microhabitat for juvenile abalone sheltering beneath urchin spines in shallow waters. They investigated the abundance of juvenile red abalone (H. rufescens) and flat abalone (H. walallensis) on protected and fished rocky shores in northern California, finding that one third of the juveniles inside the MPAs were found under the urchins' spine canopy. However, the abundance of juvenile red abalone was not correlated with the abundance of conspecifics adults. Tomascik and Holmes (2003) implied a similar interaction, but only seven percent of total number of juvenile abalone (less than or equal to 45 mm) was found under the red sea urchins' spine canopy. However, given the importance of sea urchins' spine canopy for juveniles of their own species, these studies should have evaluated the competition for that microhabitat under high sea urchin densities. Another important consideration

to study is the survival of juvenile abalone over time under high sea urchin densities and the likely competition for food.

Despite the variability of ecological conditions affecting sea urchin populations and consequent overgrazing of kelp communities, and the intra and inter-specific role of sea urchin in structuring rocky shore communities, the negative impacts of overgrazing and transition to barrens are quite convincing. Main effects may include losses in productivity and biodiversity (Tegner and Dayton 1981, 1987; Holbrook et al. 1990; Herrera 1998; Babcock et al 1999, Graham 2004 and references therein) and loss of habitat suitable for feeding and breeding fish and invertebrates (Brito et al. 2004). Thus, controlling sea urchin population by means of calcium oxide (quick-lime; Wilson and North 2009 and references therein), releasing fishing pressure on its predator (e.g. lobsters and sheepheads; Tegner & Levin 1983; Tegner & Dayton 2000) or by developing targeted fisheries (Sala et al 1998; Guidetti et al 2004) has been a common practice in various systems around the world and in California in particular.

A significant amount of studies show the effectiveness of marine protected areas (MPA), and marine reserves in particular, as conservation tools when they are placed and designed properly. Marine reserves are often established with fisheries enhancement objectives or biodiversity conservation goals. Recently, studies have begun to address biodiversity conservation through community wide changes due to marine reserves. In this respect, community state transitions between barrens and kelp forests due to marine reserves have been documented in various systems worldwide. This appears to be due to indirect effects of banning fishing, which cascade down the food chain to produce a community shift (e.g. more lobsters = fewer urchins = more kelp). Several studies indicate that releasing fishing pressure on urchin's predator (e.g. lobsters) may control sea urchins populations and allow kelp beds recovery (Babcock et al 1999; Steneck et al 2002 and references therein). However, where natural predators aren't capable of controlling herbivores populations, overgrazing may cause a decrease in macroalgae abundance and productivity, with a transition to barrens as an extreme case (Sala 1997; Davenport and Anderson 2008). Some examples of drastic changes in community compositions inside no-take marine reserves include (i) two examples in Kenya, one at the Mombassa National Park where the exclusion of artisanal fishers for several years, in conjunction with manipulative programs to reduce sea urchin populations demonstrated that herbivores mediated competition between algae and coral (McClanahan 1997), and the other at the Watamu National Park where increased herbivory slowed of the recovery of macrophytes and caused a switch toward dominance of calcareous algae (McClanahan et al 2002); (ii) a study in northern and central Chile where abundance of limpets inside human-exclusion 'no-take' areas, were coupled with a drastic decline in the abundance of macroalgae with extensive food-web modifications (Oliva and Castilla 1986); (iii) in South Africa, selective fishing on mussels

and limpets increased species richness and the substrate showed a significantly greater cover of sessile unexploited species (e.g. macroalgae; (Hockey 1994); (iv) in Ustica, Italy, the lack of human fishing pressure after the instauration of a protection regime caused a sharp increase of urchins density with consequent transformation of algal assemblages into barren areas, dominated by a few species of encrusting algae (Gianguzza et al 2006). These community and food web modifications may lead to losses in biodiversity and productivity, undermining the overarching objectives of MPAs. In this context, the examples mentioned have developed regulated selective fishing or experimental removals practices in order to control key dominant species and avoid drastic changes in community composition and structure.

Another important benefit of regulated fishing inside MPAs is the inclusion of fishermen and stakeholders in the regulatory and enforcement process. Cooperation in MPA implementation and enforcement and in resource management by local communities of users has been shown as a critical step in attaining the specific objectives behind these protected areas worldwide (Africa: South Africa, Kenya; Asia: Philippines, Bangladesh, Japan; Oceania: Vanuatu, Samoa, Australia; North America: USA, Canada, Mexico; South America: Brazil, Chile, Peru; and Europe: Italy, France, Sweden, UK; Gutierrez and Hilborn in prep.) In addition, community-based MPAs that are periodically harvested are increasingly being implemented as fisheries management tools. Some examples of local community involvement in implementing and enforcing MPAs include: (1) coral reefs in Vanuatu, where a periodical fishing inside the reserve has demonstrated both ecosystem and fishing benefits (Bartlett et al 2009); (2) cooperative fishing in the Gulf of California, Mexico, where MPAs are the core component of the management system (Cudney-Bueno and Basurto 2009); (3) a cod fishery in the Baltic sea, where fishermen participation in fishery regulations inside a MPA improved rule compliance and led to a sustainable fishery (Suuronen et al 2010); Further, Pollnac et al. (2010) show in a recent review of 127 MPAs published in the Proceedings of National Academy of Sciences that high levels of compliance with reserve rules were more related to complex social interactions, such as fishermen incentives and community cohesion and leadership, than simply to enforcement of reserve rules.

Finally, besides the implementation and enforcement benefits, co-management or community-based management (CBM) of MPAs also allow time and cost efficient monitoring of resources within the protected area. Data collection on targeted resources, habitat, and its associated species by fishermen has been used and described for different fisheries worldwide (Chile, Australia, New Zealand, Spain). In the Australian abalone fishery, divers gather and process fishery-dependent information in what Prince (2003) popularized as the "Barefoot Ecologist" program. In California, the San Diego Watermen's Association (SDWA), which includes divers that target local red sea urchins *Strongylocentrotus franciscanus*, started a CB data collection program in

2001 (Schroeter et al. 2009). In collaboration with independent scientists and biologists, the SDWA developed a program to gather, organize, and analyze both fishery-dependent and fishery-independent data on the local red sea urchin fishery. These CB data collection programs are of particular importance for sea urchins and other sedentary or low mobility invertebrates (e.g. lobsters, abalones). Fine-scale spatial heterogeneity in their life history traits demands a great amount of spatial and temporal information in order to depict patterns and processes in their population dynamics needed for proper stock assessments and management plans (Butterworth and Punt 1999; Hobday and Punt 2009). This fine-scale spatial and temporal resolution in data collection and analysis has been proved extremely difficult to achieve without fishermen involvement.

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### Attachments to this message same as those for Dave Rudie, March 14, 2010 - not duplicated

From: Bruce Campbell

Sent: Wednesday, March 17, 2010 11:19 PM

**To:** MLPAComments **Subject:** Urchins

As a member of Albion Harbor Regional Alliance we submit this study for the Science Advisory Team to review.

Letter of introduction written by Bob Bertelli and Tom Trumper of CSUC and attached science document.

Bruce Campbell Mgr. Albion River Campground Member: Albion Harbor Regional Alliance

From: InterTribal Sinkyone Wilderness Council Sent: Wednesday, March 17, 2010 8:52 PM

**To:** MLPAComments

**Cc:** Roberta Cordero; Cindy Gustafson; Meg Caldwell; Catherine Reheis-Boyd; Virginia Strom-Martin; Jimmy Smith; Greg Schem; Bill Anderson; Ken Wiseman; Melissa Miller-Henson; Kelly

Sayce

Subject: Statement by InterTribal Sinkyone Council to BRTF

Dear Blue Ribbon Task Force Members:

Attached is the Statement of the InterTribal Sinkyone Wilderness Council on Tribal Policy for consideration at your meeting of March 18.

We thank you in advance for taking the time to read and consider it.

Please contact me if you have any questions.

Sincerely, Hawk Hawk Rosales, Executive Director InterTribal Sinkyone Wilderness Council P.O. Box 1523 Ukiah, CA 95482



# InterTribal Sinkyone Wilderness Council

P.O. Box 1523 Ukiah, CA 95482 Phone (707) 468-9500



### InterTribal Cultural Conservation for Sinkyone Indian Lands

### **California Marine Life Protection Act Initiative**

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Meeting of March 18, 2010

# STATEMENT OF INTERTRIBAL SINKYONE WILDERNESS COUNCIL ON TRIBAL USE POLICY

The InterTribal Sinkyone Wilderness Council takes this opportunity to comment on the Initiative's development of a Tribal Use Policy. We understand the Blue Ribbon Task Force (BRTF) intends to adopt such a policy in order to guide the Regional Stakeholder Group's evaluation of external and internal arrays. The need for such guidance arises from the regrettable fact that the Marine Life Protection Act neglected to explicitly address Tribal rights and interests. We are confident, however, that a policy can be devised that avoids interference with long-established Tribal traditional cultural subsistence uses, and at the same time stays within the legal parameters of the Act and other provisions of State and federal law.

We agree with the sum and substance of the prior BRTF discussion that a "policy of affirmation" of the rights of Indian Tribes to continue their traditional uses is most appropriate. We have revised our earlier draft policy recommendation to take into account the emerging consensus on the BRTF that Tribal uses should be protected by avoiding those areas along the North Coast where such uses have traditionally been carried out. In our view, the policy directive to the Regional Stakeholder Group should include the following:

- Arrays developed by the Regional Stakeholder Group (RSG) should accommodate traditional cultural subsistence, ceremonial and other customary uses of marine resources carried out by the North Coast Tribes and Tribal communities of Mendocino, Lake, Humboldt, and Del Norte Counties pursuant to aboriginal right or long-established continuous practice by either:
  - a) Delineating Marine Protected Area (MPA) boundaries that do not overlap with such cultural use areas; or
  - b) Identifying such uses as permanently permitted uses within the MPAs.
- The Regional Stakeholder Group should consult with North Coast Tribes to understand the nature and scope of Tribal uses and should further develop proposed MPAs in ways that do not interfere with such uses.
- The Regional Stakeholder Group should identify and recommend to the Blue Ribbon Task Force potential co-management approaches for effective stewardship of critical marine resource areas, consistent with State and federal law.
- The Regional Stakeholder Group's recommendations to the Blue Ribbon Task Force regarding any Tribal issues need to be provided to the Tribes for their review and input prior to the Stakeholder Group submitting such recommendations to the Blue Ribbon Task Force.

We understand the Initiative staff has sought legal advice and guidance from counsel for the Department of Fish and Game and/or the Office of the Attorney General. Our concern is that the array evaluation process now underway may advance too quickly for the legal guidance to have its maximum utility. To address this concern, we would like to suggest that until the guidance is forthcoming, the BRTF direct the RSG to draw the boundaries of MPAs to avoid those areas identified by the Tribes as traditional cultural subsistence use areas. The Tribes have repeatedly made the point that avoiding interference with their traditional cultural uses is consistent with the MLPA's goal of protecting, stewarding and conserving marine resources. This pivotal point is supported by the documented facts that, since the beginning of time, the Tribes have been responsible stewards of their aboriginal lands and waters, and that continued Tribal uses have minimal adverse impacts to marine resources. No further legal authority for a policy of avoidance is needed.

If this conclusion turns out to be wrong, and insurmountable legal obstacles to accommodating Tribal uses in this way are identified, at that time the Initiative can undertake further consultations with Tribes to develop other measures designed to maintain consistency with State and federal law. Tribal uses cannot be ignored in these early stages of MPA development; otherwise, subsequent revisions to the MPAs will be much more difficult and problematic. If such revisions cannot be or are not made, the Initiative will have failed in its goal to respond favorably to the concerns of sovereign Indian Tribes. Having heard from more than 25 North Coast Tribes of the paramount concern of continuing traditional uses, the Initiative should not proceed further with MPA development without first addressing such uses.

In addition to this concern with timing, the InterTribal Sinkyone Wilderness Council is also concerned about several proposals for the process by which the Tribal Use Policy may be adopted. We do not support the creation of a tribal advisory group to recommend a policy because this would defeat the goal of conducting genuine consultation with individual North Coast Tribes.

Finally, we understand the BRTF has considered hiring outside counsel to give advice and recommendations for a Tribal Use Policy. Although such advice would be welcome, we do not believe it is necessary at this time. Counsel for the InterTribal Sinkyone Wilderness Council can assist the attorneys for the Department of Fish and Game and in the Office of the Attorney General in working through all the legal questions that have arisen. Together, we believe counsel for the Tribes and the Initiative can develop creative solutions to reaching the goal of the BRTF of avoiding interference with the traditional cultural subsistence uses of North Coast Tribes.

Thank you for your consideration of our views.

### Begin forwarded message:

From: InterTribal Sinkyone Wilderness Council

Date: March 18, 2010 7:48:15 PM PDT

To: Roberta, Cindy Gustafson, Meg Caldwell, Catherine Reheis-Boyd, Virginia

Strom-Martin, Jimmy Smith, Greg Schem

Cc: Ken Wiseman

Subject: Follow-Up Comments for 3/18 Meeting

### **BRTF Members:**

Attached are follow-up comments to the written statement by the InterTribal Sinkyone Wilderness Council that was presented and discussed at today's meeting. Due to technical difficulties, I unfortunately was unable to read to you our Council's prepared oral statement that was meant to compliment our written statement. I have modified the oral statement, within the context of remarks made at today's meeting.

Please pass this on to Bill Anderson, as I am unable to reach him by email.

Thank you for your consideration.

Hawk

Hawk Rosales, Executive Director InterTribal Sinkyone Wilderness Council P.O. Box 1523 Ukiah, CA 95482

### Follow-Up Statement by InterTribal Sinkyone Wilderness Council to MLPA Blue Ribbon Task Force March 18, 2010

The following comments are submitted as follow-up to our Council's written statement provided to the Blue Ribbon Task Force members, and discussed at length during today's meeting. We had prepared an oral statement that we were ready to read to the Task Force during today's meeting, but due to technical challenges the Council's Executive Director Hawk Rosales was not able to get into the teleconference queue for public comment under agenda item II.B.

### Follow-up Comments

We appreciate the opportunity to address you today on the subject of Tribal Use Policy for the MLPA Initiative. As you know, we have submitted a separate written statement on this matter for the record, entitled *Statement of the InterTribal Sinkyone Wilderness Council on Tribal Use Policy*, which has been provided to all the BRTF members.

In drafting our written statement, we continue to engage in ongoing communication with our colleagues and allies who are Tribal representatives and community members from throughout the North Coast region, including those from the North Coast Tribes that are not members of our Tribal consortium.

We especially want to thank Meg Caldwell for reading aloud during today's meeting our four recommended policy directive elements. We also wish to thank the other Task Force members and MLPA Initiative staff for their excellent observations and questions regarding our statement. Our statement generated some responses that we would like to address at more length, and in a setting where we can have an actual face-to-face exchange with BRTF members and Initiative staff. This would allow us to examine with you in more depth the issues surrounding Tribal policy, and to move toward resolution of the several key points of concern now under discussion.

We ask that the Task Force move toward adopting a policy that affirms Tribal rights to continue to access and use their traditional cultural subsistence areas, as they have done since the beginning of time. Toward the achievement of that goal, we ask that the Tribal policy to be developed include the points outlined in our written statement, and which were read and displayed at today's meeting. We ask that you give special attention to the four elements of our statement, for they

encompass an approach that will ensure the Tribes can continue conducting their traditional ways of life within the State's marine zone, which represents a vital and an inalienable part of North Coast Indigenous Peoples' cultural heritage.

As regards the legal questions that have been raised, we do not believe the Task Force needs to wait for additional legal advice from the Department of Fish & Game or the Attorney General's Office prior to adopting this policy. It would be best for the Task Force to act expeditiously by directing the Regional Stakeholder Group to draw MPA boundaries that avoid the traditional subsistence use areas of the Tribes. If legal advice requires changes to that policy of avoidance, revisions can be made to the MPAs later to take that need into account. In the meantime, we are willing to share with you the findings of our extensive legal research on these questions, and to discuss these questions—and solutions to them—with you collegially.

We wish to make clear that we do not support the creation of a tribal advisory group to recommend a policy, as we believe the establishment of such a group would likely defeat the need for direct and genuine consultation with the individual Tribal governments of the North Coast region.

Again, we would welcome a meeting between the BRTF and their legal counsel, and the InterTribal Sinkyone Wilderness Council and its legal counsel to discuss these matters face-to-face and in more depth.

Thank you for your continued willingness to discuss and work with the Tribes toward resolution of these important issues. We look forward to working collaboratively with you on the next steps of this process.

From: Reweti Wiki

Sent: Thursday, March 18, 2010 3:09 PM

To: Ken Wiseman; Sonke Mastrup; bota@dfg.ca.gov; MLPAComments

Subject:

All,

Please allow me to share with you information concerning New Zealand's management of customary fishing / tribal management of marine reserves. The origins of the various reserves are probably not as a relevant as the framework that has been created. I am always available for further discussion.

http://www.fish.govt.nz/en-nz/Maori/default.htm?wbc\_purpose=Basic&WBCMODE=PresentationUnpublished

http://www.fish.govt.nz/en-nz/Maori/Management/Mataitai/default.htm

http://www.fish.govt.nz/en-nz/Maori/Management/Taiapure/default.htm?wbc\_purpose=Basic&WBCMODE=PresentationUnpublished

Wok-hlaw' / Hum-chee

**Reweti Wiki** | Chief Governmental Officer Elk Valley Rancheria, California

From: Andy Salvas

Sent: Tuesday, March 23, 2010 12:21 PM

**To:** MLPAComments

Subject: RSG Meeting 3/24 & 3/25

Dear BRTF and all RSG members,

I would like to make it known that Array B has my full support. Not only does it have a high conservation value, it balances the needs of all North Coast user groups. I realize it is preliminary, but trust that the MOCA RSG members, such as Dave Wright, will speak on my behalf and represent my interests as conservationist, kayak angler, and frequent north coast visitor. I encourage the principals behind arrays C, D, E to seek to mitigate the hardship which would result from those arrays by working with the principals behind Arrays B, F, G, H for a unified proposal keeping in mind the best interests of the whole North Coast community and the many visitors that recreate in the area each year. Thank you.

Andy Salvas San Rafael, CA From: Barbara Moller [mailto:mskrazykitty@yahoo.com]

Sent: Wednesday, March 24, 2010 2:23 PM To: MLPA Initiative via dfgwebcontent Subject: ocean protection vs. MLPA

The increasing carbon dioxide, CO2, is combining with ocean water and taking one of the hydrogen ions out of ocean water and forming carbonic acid, making the ocean more and more acidic. It directly affects the food change because the acid leaches calcium out of the growing crustaceans, making their shells too soft and takes away many of the fishes and other mammals food.

One more item which needs to be addressed. The U.S. Supreme Court failed to identify the jurisdiction which covers corporations from dumping pollutants into our streams and rivers. The corporate folks now believe they have a carte blanch to dump their waste into streams and rivers, which flow to the ocean. **Question**: Just how is the Marine Life Protection Areas, in California, by Govenor Schwarzeneggar, going to protect ocean life AGAINST the increasing ocean pollution? IT APPEARS TO BE A POLITICAL PLOY? SHAME SHAME ON SCHWARZENEGGAR.

I am suggesting that the MLPA, Marine Life Protection Areas, are a weak bandaide which will do nothing REAL to protect ocean life against pollution. THE REAL PROBLEM FOR ALL OF THE EARTHS OCEANS IS POLLUTION, AND

THAT IS WHAT SHOULD BE ADDRESSED. IF THE OCEANS CONTINUE TO DIE, HUMANITY

WILL SOON FOLLOW, AND NO ONE DOES ANYTHING REAL TO PROTECT THE OCEAN,

BECAUSE IT WOULD CUT INTO THEIR PROFITS. Barbara Jo Moller

P.S. They have raped the forests of the Earth and now they are going to rape the OCEANS of the EARTH and no one seems to care. BY THE WAY MR. PRESIDENT, CONGRATULATIONS ON THE HEALTH CARE ISSUE. NOW PLEASE FOCUS ON

THE HEALTH CARE OF THE PLANET, BECAUSE IF THE PLANET DOES NOT SURVIVE, NO

HUMAN WILL SURVIVE---WITH OR WITHOUT HEALTHCARE. THANK YOU.

From: Brooke McVeigh

Sent: Thursday, March 25, 2010 11:58 AM

**To:** MLPAComments

Subject: I support MPAs in CA!

I support the MLPA process! There is plenty of great science supporting the effectiveness of marine protected areas. In the long run, this will hopefully help the very people, fishermen, who now oppose MPAs because of their perceived short-term economic loss. Marine protected areas, like our state and national parks on land, are national treasures and contribute to the conservation of habitat, ecosystems, and species. Please support the implementation of MPAs along the California coast. Sincerely,

Brooke A. Budnick McVeigh McKinleyville, CA

From: Rachel Baker-de Kater

Sent: Thursday, March 25, 2010 11:06 AM

To: MLPAComments
Subject: mlpa support

My name is Rachel Baker-de Kater, and I am a geologist in McKinleyville, Ca. I have been following the MLPA and want to show support for arrays that follow the science guidelines, meet the goals of the MLPA in biodiversity conservation while minimizing the socioeconomic implications to our coastal community. I support the MPA networks in Arrays C,D and E and want to thank the Regional Stakeholders in their effort to meet the guidelines of the MLPA and in representing us, the community. As a resident of Humboldt County I find it extremely important to protect our natural resources and think that the MLPA is doing it right.

Sincerely,

Rachel Baker-de Kater

From: WEINSTEIN, Anna [mailto:aweinstein@audubon.org]

Sent: Wednesday, March 31, 2010 4:00 PM

To: MLPAComments

Subject: comments for MLPA North Coast Regional Stakeholder Group, BRTF, and DFG

Implementation Team

### Hello:

Please find the attached comments intended for the MLPA North Coast Regional Stakeholder Group, BRTF, and DFG Implementation Team.

Thank you,

### Anna

Anna Weinstein Seabird Conservation Coordinator Audubon California 4225 Hollis Street Emeryville, CA 94608 (510) 601-1866 x233



March 30, 2010

To: MLPA Blue Ribbon Task Force, North Coast Regional Stakeholder Group, and Department of Fish and Game Implementation Team

Re: Recommendations for the protection of marine and coastal birds in the MLPA process

Dear Task Force, Stakeholder Group, and Implementation Team members,

We are writing on behalf of our 51,000 members to express strong support of the Marine Life Protection Act for the North Coast study area, and to provide specific recommendations to benefit marine and coastal birds in the region. We are sensitive to the need and desire of the North Coast community to retain a broad-based culture and economy, and make these recommendations accordingly.

The North Coast is disproportionately rich in seabirds breeding in dense aggregations on the rocks and islets of the California Coastal National Monument. The study area supports hundreds of thousands of individuals, comprising 40% of California's breeding seabirds. Many of these species are of special status, including Fork-Tailed Storm Petrel, Cassin's Auklet, Tufted Puffin, Marbled Murrelet, Western Snowy Plover, Harlequin Duck and Brant. Some State waters support foraging visitors from New Zealand, Japan and Hawaii, such as Sooty Shearwater and Black-footed, Short-tailed and Laysan Albatross.

Together, all of the region's marine birds and marine mammals play a key role in the ecosystem, and provide gratifying and lucrative opportunities for wildlife viewing for tourists and residents.

### **Recommendation #1: Special Closure Work Group**

Form a Special Closures Work Group within the Regional Stakeholder Group. Special closures have been identified by Science Advisory Team members as the most direct way to benefit seabirds through the MLPA. Special closures will significantly benefit seabirds and marine mammals by protecting these sites from vessels, low-flying private aircraft, and foot disturbance, while having a negligible impact on fishing or waterborne recreation.

Audubon California has consulted with experts and the literature to identify the following islands or islets as top candidates for 300-1000 ft special closures: **Castle Rock** (41deg 45.638"), **Redding Rock** (41deg 20.104"), **Flatiron Rock**, **Steamboat Rock** (40deg 24.54"), and **Cape Vizcaino** (39deg 43.6").

### **Recommendation #2: MPAs**

- A new MPA centered at ~41deg 40.130", off Del Norte Coast Redwoods State Park would benefit the Sister Rocks seabird colony and Marbled Murrelet foraging.
- False Klamath draft MPA. High benefit as is. Recommendation: Improve by pushing border 0.5 km north to capture False Klamath Rock complex to reduce vessel traffic near the rock. False Klamath Rock (41 deg 35.644") hosts at least 8 species, about 45,000 breeding birds, mostly Common Murres. Also, this MPA is well within foraging radius of Common Murre, Tufted Puffin, and other colony-nesting seabirds at Castle Rock and Sister Rocks (41deg 40.067")
- Redding Rock draft MPA.
   High benefit as is. MPA sits on Redding Rock (41 deg 20.104'), a colony under consideration for Department of Fish and Game Oil Spill Protection and Response restoration funding. Also close proximity to Marbled Murrelet foraging hotspot around mouth of Redwood Creek.
- Patrick's Point draft MPA. Moderate benefit as is. Improve by extending border extended 1-13 km south to overlap with Trinidad Colony Complex (~41deg 02'- 41 deg 08') extending from just south of Patrick's Pt. to Little River Rock. 12 nesting species, ~100,000 breeding birds, mostly Common Murres. Also Fork-tailed Storm-Petrels, Cassin's Auklets, and Tufted Puffins.
- A new MPA centered at 40 deg 20' to 40 deg 27' to benefit Cape Mendocino Complex- False Cape Rock (40deg30'), Sugarloaf Rock (40'26'18"), Steamboat Rock (40'24"54") colonies.
- Gorda and Big Flat draft MPAs.
   High benefit as is. Suspected key area for pelagic foraging given the narrow shelf and nearshore canyons conducive to upwelling.
- Usal draft MPA.
   High benefit as is. Serves Vizcaino Complex Rockport Rocks and Cape Vizcaino seabird breeding areas (39deg 43.6').
- Navarro River draft MPA.
   High benefit as is. Serves birds of Navarro River Estuary SMR.

### **Recommendation #3: Estuaries**

Provide protection to the following estuaries:

- South Humboldt Bay draft SMR and SMCA High benefit as is; annually supports 20,000-80,000 shorebirds, 24 species of waterfowl, global area for Brant (25% of population) Extensive eelgrass beds.
- Big River draft SMR
   The North Coast estuary with the largest fresh/salt mixing zone.
- Ten Mile River draft SMR
   Key area for shorebirds resting and feeding during migrations. Also breeding Black Oystercatcher and Western Snowy Plover.
- Navarro River draft SMR
   Key area for shorebirds resting and feeding during migrations. Also breeding Black Oystercatcher and Western Snowy Plover.

Thank you for considering these comments.

Sincerely.

Anna Weinstein Seabird Conservation Coordinator

### References:

Shuford, W.D. and T. Gardali, eds. 2008. California Bird Species of Special Concern. Western Field Ornithologists and California Department of Fish and Game.

Carter, H. et al. 1992. Breeding Populations of Seabirds in California, 1989-1991. USFWS.

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Heberti, P. and R. T. Golightly. 2008. At-sea distribution and movements of nesting and non-nesting Marbled Murrelets (Brachyramphus marmoratus) in northern California. Marine Ornithology 36: 99–105.

North Coast MLPA Marine Map Tool.

G. McChesney, San Francisco Bay Refuge Complex Manager, pers comm. 2010.

Dr. William Sydeman, Farallon Institute, pers comm.. 2010.

H. Carter, Carter Biological Consulting, pers comm. 2010.

Dave Jensen, Mendocino Audubon, pers comm. 2010.

Eric Nelson, Humboldt Bay National Wildlife Refuge, pers comm. 2010.